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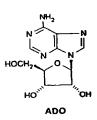
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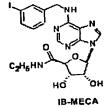
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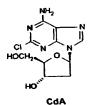
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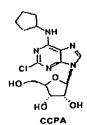
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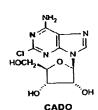












(57) Abstract: The present invention provides methods of treating individuals having malignancies associated with estrogen receptor activity comprising administering to an individual affected with said malignancy, an effective amount of adenosine analog in a pharmaceutical carrier to downregulate or diminish estrogen receptors in the cells. The invention further provides methods of identifying novel adenosine analogues capable of treating malignant cells expressing estrogen receptors. The invention also provides kits comprising adenosine analogs for downregulating estrogen receptors in cells and kits for screening for novel adenosine analogs capable of downregulating estrogen receptors. Further, the invention provides uses of adenosine analogs in downregulation of estrogen receptors, cell growth and cell cycle, as well as pharmaceutical compositions comprising adenosine analogs effective in suppressing cellular growth, cell cycle or downregulating estrogen receptors.